



Building Networks with Cytoscape

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Samuel J. Wood Library & C.V. Starr Biomedical Information Center

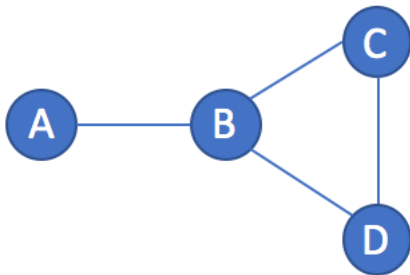
If you have feedback, suggestions, or ideas, here's how to get in touch with me:

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Exercise 1: Create a small network as an adjacency list and open it in Cytoscape



1. Open Cytoscape (Start, All Programs, Cytoscape_3.4.0, Cytoscape)
2. While you are waiting for Cytoscape to load, right-click the desktop and select New, Text Document
3. Change the name of the file to “mynet”
4. Transcribe the above network into an adjacency list by indicating all the links between the nodes. For example, for the link between A and B, record the adjacency by typing A, followed by a tab, followed by B:

A B

5. Each adjacency should appear on its own line of the file. Your completed adjacency list should look something like this:

A B
B C
B D
C D

6. Save the file, making note of its location
7. In Cytoscape, have a look at the Welcome to Cytoscape panel, then click “From Network File...” or, from the menus, select File, Import, Network, File
8. Select the file you just created (click “Desktop”)
9. Click Advanced Options...
10. Uncheck the box for “Use first line as column names” and click OK
11. Use the column header controls to indicate that the first column is the “source node” and the second column is the “target node”
12. Click OK
13. Click the Style button in the left navigation bar
14. Change to a different visual style
15. Select Layout, Prefuse force-directed layout
16. Select Tools, NetworkAnalyzer, Network Analysis, Analyze Network

Exercise 2: Import a biological network into Cytoscape

1. Select File, Import, Network, File
2. Navigate to the directory where Cytoscape sample data are stored. On a Mac, this may be in /Applications/Cytoscape_v3.4.0/sampleData; on Windows, C:\Program Files\Cytoscape_v3.4.0\sampleData
3. Select the file galFiltered.sif and click Open
4. In the “Network Collection” drop-down menu, select “Create new network collection” and click OK
5. Try out a few visual styles and layouts, as above